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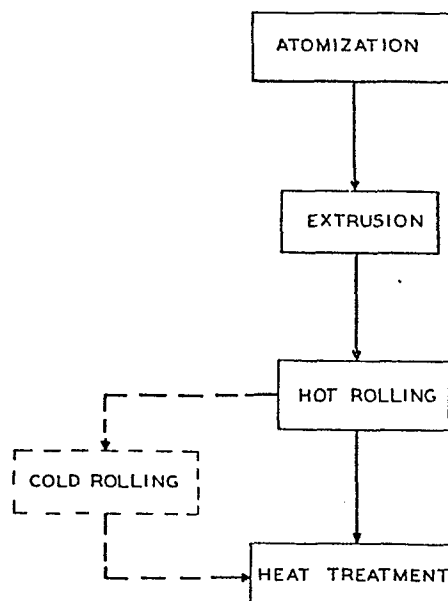
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(54) **Process for making alloys having a coarse elongated grain structure.**

(57) A process for making high temperature alloys having a coarse elongated grain structure is described in which the alloy is water atomised so that a controlled amount of oxygen is introduced into the alloy, and is extruded and hot rolled in a direction substantially parallel to the extrusion direction, optionally cold rolled and then annealed to permit recrystallisation. The alloys produced exhibit good high temperature strength and stress rupture properties.

FIG.1





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# EUROPEAN SEARCH REPORT

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EP 84 30 4872

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                        |                                                |                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Citation of document with indication, where appropriate, of relevant passages          | Relevant to claim                              | CLASSIFICATION OF THE APPLICATION (Int. Cl.4) |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | GB-A- 871 065 (MANNESMAN A.G.)<br>* Whole document *                                   | 1-14                                           | B 22 F 9/08<br>B 22 F 3/24<br>C 22 F 1/10     |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US-A-3 368 883 (W.J. BARNETT)<br>* Column 7, lines 6-40; claim 1 *                     | 1-14                                           |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US-A-3 696 486 (J.S. BENJAMIN)<br>* Claim 1 *                                          | 8                                              |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | GB-A-1 107 669 (G.E.)<br>* Claim 1-3 *                                                 | 9                                              |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US-A-3 909 309 (THE INTERNATIONAL NICKEL CO.)<br>* Column 4; example 1; claims 1,6-7 * | 9                                              |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | US-A-3 595 710 (J.B. LAMBERT et al.)<br>* Claims 1-6; column 3, example *              | 9                                              |                                               |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                        |                                                | TECHNICAL FIELDS SEARCHED (Int. Cl.4)         |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                        | Date of completion of the search<br>05-03-1986 | Examiner<br>SCHRUEERS H.J.                    |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                        |                                                |                                               |